

**Chicago State  
University College of  
Pharmacy Evidence of  
Student Learning**

Measures of Student Achievement – Capstone Research Experience

- 100% of Chicago State University College of Pharmacy graduates complete a required Capstone Research Experience. In 2013, this resulted in 40 scientific poster presentations. Examples of research include:
  - Preliminary Phytochemical Investigation of Cochlospermum angolense Bark\*
  - Pharmacists-Led Phone Calls after Hospital Discharge and Acute Decompensated Heart Failure Readmissions\*
  - Comparison of Traditional Point of Care Testing in an Anticoagulation Clinic versus Home Self-Testing\*
  - Capstone Research Projects & Beyond: Perceptions of Fourth Year Professional Students on Pharmacy Job Attainment\*
  - The Pharmacist as a Public Resource\*
  - A Phytochemical Chemical Approach to Drug Discovery from Traditional Herbal Remedies
  - Determining the Causes of Low Enrollment Rates of Hispanic Students in Illinois Pharmacy Schools
  - Substance Abuse Education for Grade School through High School-Aged Children
  - Development of a Compact Aquaponics System to Grow Dietary Herbal Supplements (Phase 2)
  - Health Education and Adherence to Lifestyle Enhancements (HEALE) Trial: Health Education for the Prevention of Hypertension in College Students
- In 2014, this resulted in 51 scientific poster presentations. Examples of research include:
  - Knowledge of Medicines and Health Related Issues\*\*

- Perceptions of a Compact Aquaponics System in Inner City Neighborhoods of Chicago: A Potential Solution to Food Deserts and Nutritional Deficiencies in the Community\*\*
- Evaluation of Oral Extended-Release Drug Formulations for Cancer Epigenetic Therapy\*\*
- Perception of 4<sup>th</sup> Year Pharmacy Students about Using Herbal Products after Taking a Three Month Course of Complementary and Alternative Medicine at Chicago State University College of Pharmacy\*\*
- In 2017, examples of scientific research poster presentations include:
  - HPLC Determination of Phenolic Acids as Antioxidant Markers of Borotutu Bark\*\*\*
  - Inpatient cost of Ischemic Stroke in USA\*\*\*
  - Launch of a biochemistry application via the internet as a study tool for students in the PHAR 6113-6114 sequence
  - Patients' opinion on health screenings at a community pharmacy\*\*\*
- In 2018, examples of scientific research poster presentations include:
  - Evidence of NSAIDs in Sickle Cell Disease and Incidence of Renal Dysfunction<sup>#</sup>
  - High Glucose Disrupts Coronary Artery Endothelial Barrier Function and Prevents Wound Healing Process Via Dismantling of Junctional Protein, VE-Cadherin<sup>#</sup>
  - In Vitro Analysis of Embelin in Combination with Afatinib as Chemotherapeutic Strategy for Treating Breast Cancer<sup>#</sup>
  - Development of a Biochemistry Mobile Website Phase 4<sup>#</sup>

\*Selected Best of Capstone Research Day – May 3, 2013

\*\*Selected Best of Capstone Research Day – May 2, 2014

\*\*\*Selected Best of Capstone Research Day – 2017

### Measures of Student Achievement – Research & Fellowship

- In 2017, students presented scientific research at a national meeting.
  - Students presented at the 2017 ASHP Midyear Clinical Meeting in Orlando, FL. The posters were as follows:
    - Duaa Oshaik: Evaluation of NSAID use in the sickle cell disease population and incidence of renal dysfunction
    - Syeda Wasima: Outcomes of Continuous Glucose Monitoring Shared Appointments on Self-Efficacy for Diabetes
    - Florence Garza: Impact of adding pharmacist-physician collaboration to an interprofessional diabetes center
- In 2016, students presented scientific research at local, state, and national meetings.
  - Students and faculty presented a scientific poster in the 2016 Spring Symposium & Student Research Conference in Science, Technology, Engineering, and Mathematics entitled “Student Pharmacists Perceptions of Consumerism in Academia”
  - Students presented at the 2016 ASHP Midyear Clinical Meeting in Las Vegas, NV. The posters were as follows:
    - Development of new reactions for use in medicinal chemistry: Novel method for one-pot two-step synthesis of acylated ureas and carbamates

- Outcomes associated with time-to-antibiotic administration among patients with febrile neutropenia in the emergency department
  - Impact of epidural standardization on the safety and efficacy of epidural management
- In 2013, students have presented scientific research at local, state and national meetings.
  - Students placed first in the 2013 Spring Symposium and Research Conference in Science, Technology, Engineering and Math poster competition with a poster entitled, “Neurotoxic Effects of Acrylamide on Expression of Nr4a2 in the Nervous System of Juvenile Rats.”
  - Students presented at the 2013 ASHP Midyear Clinical Meeting in Las Vegas, NV. Examples of presentations include the following:
    - Comparison of Parthenolide Levels in Aquaponically versus Conventionally Grown Tanacetum Parthenium (Feverfew)
    - Concentration-dependent Inhibition of Recombinant Human Fatty Acid Amid Hydrolase and Monoacylglycerol Lipase by Nutmeg Extracts
    - Impact and Perception of Senior Buddy Program on Community-Dwelling Older Adults
- Five Chicago State University College of Pharmacy students have received the prestigious Schweitzer Fellowship.
  - Angela Pruitt (2016-17)
  - Michael Wilcox (2014-15)
  - Bernice Mann (2013-14)
  - Maimoona Batul (2011-12)
  - James Lott (2009-10)